

03050204-020

(Shaw Creek)

General Description

Watershed 03050204-020 is located in Aiken and Edgefield Counties and consists primarily of *Shaw Creek* and its tributaries. The watershed occupies 86,484 acres of the Sandhills and Upper Coastal Plain regions of South Carolina. The predominant soil types consist of an association of the Fuquay-Troup-Lakeland-Orangeburg-Wagram series. The erodibility of the soil (K) averages 0.15 and the slope of the terrain averages 5%, with a range of 0-25%. Land use/land cover in the watershed includes: 46.9% forested land, 34.8% agricultural land, 8.0% barren land, 6.2% forested wetland (swamp), 2.9% urban land, 0.9% water, and 0.3% nonforested wetland (marsh).

Shaw Creek originates near the Town of Trenton and flows past the City of Aiken to drain into the South Fork Edisto River. Shaw Creek receives drainage from Buck Branch and Tiger Creek before flowing through Lone Pond and accepting drainage from Hillyer Branch, Paces Branch, Beaverdam Branch, Hall Branch, Melton Branch, Curry Branch, Mason Branch, Boggy Branch, Brogdon Branch, Dairy Branch, and Long Branch. The river then accepts drainage from Bradley Mill Branch, Joyce Branch, Redds Branch, Clearwater Branch, Chavous Branch, and Cedar Branch (Cedar Lake). There are a total of 153.1 stream miles and 648.0 acres of lake waters in this watershed, all classified FW.

Surface Water Quality

<u>Station #</u>	<u>Type</u>	<u>Class</u>	<u>Description</u>
E-579	BIO	FW	SHAW CREEK AT S-02-153
E-094	P/W	FW	SHAW CREEK AT S-02-26, 4.2 MILES NE OF AIKEN
E-106	W/INT	FW	SHAW CREEK AT S-02-576

Shaw Creek – There are three SCDHEC monitoring sites along Shaw Creek. Aquatic life uses are fully supported at the upstream site (**E-579**) based on macroinvertebrate community data. At the midstream site (**E-094**), aquatic life uses are not supported due to pH excursions. There is a significant increasing trend in total phosphorus concentration and a significant decreasing trend in pH. Recreational uses are fully supported. Aquatic life and recreational uses are fully supported at the downstream site (**E-106**). This is a blackwater system, characterized by naturally low pH and dissolved oxygen concentrations. Although pH excursions were noted at E-094 and E-106, they were typical of values seen in such systems; however, the decreasing trends in pH at E-094 suggest changing conditions for that portion of the stream.

Groundwater Quality

<u>Well #</u>	<u>Class</u>	<u>Aquifer</u>	<u>Location</u>
AMB-028	GB	MIDDENDORF	MONTMORENCI COUCHTON

NPDES Program

Active NPDES Facilities

<i>RECEIVING STREAM FACILITY NAME PERMITTED FLOW @ PIPE (MGD)</i>	<i>NPDES# TYPE COMMENT</i>
SHAW CREEK KENTUCKY-TENNESSEE CLAY CO. PIPE #: 001 FLOW: M/R	SCG730046 MINOR INDUSTRIAL
SHAW CREEK CITY OF AIKEN/SHAW CREEK WTP PIPE #: 001 FLOW: M/R	SCG641003 MINOR DOMESTIC
PACES BRANCH ECW&SA/TRENTON WWTP PIPE #: 001 FLOW: 0.073	SC0025682 MINOR DOMESTIC

Nonpoint Source Management Program

Land Disposal Activities

Landfill Facilities

<i>LANDFILL NAME FACILITY TYPE</i>	<i>PERMIT # STATUS</i>
CITY OF AIKEN LANDFILL MUNICIPAL	DWP-037 CLOSED
OWENS CORNING INDUSTRIAL	022431-1601 ACTIVE

Land Application Sites

<i>LAND APPLICATION FACILITY NAME</i>	<i>PERMIT # TYPE</i>
SPRAYFIELD SHREE OF AIKEN/INN OF AIKEN	ND0065871 DOMESTIC
SPRAYFIELD SC FORESTRY/TAYLOR TREE NURSERY	ND0076830 INDUSTRIAL
SPRAYFIELD OWENS CORNING/AIKEN PLANT	ND0070963 INDUSTRIAL

Mining Activities

<i>MINING COMPANY MINING NAME</i>	<i>PERMIT # STATUS</i>
EC CULBREATH & SON, INC. CULBREATH ASPHALT PLANT	0152-03 SAND
GL WILLIAMS & SON TRUCKING, INC. APAC MINE	1142-03 SAND; SAND/CLAY

Water Quantity

WATER USER
WATERBODY

REGULATED CAPACITY (MGD)
PUMPING CAPACITY (MGD)

CITY OF AIKEN
SHAW CREEK

6.0
12.8

Growth Potential

There is a moderate potential for growth in this watershed, which contains the Town of Trenton and a portion of the City of Aiken. There is a high potential for commercial growth surrounding the interchanges of I-20 and U.S. 1 and S.C. 19; both Highways 1 and 19 have plans for widening to four lanes. S.C. 19 runs through the City of Aiken and intersects with several rail lines that would increase industrial potential. The Town of Trenton has tied into the Edgefield County Water and Sewer Authority's Regional Sewer Collection System, which should enhance industrial growth.